App. F. IX-4

*Previous References*

1928-29 ( G. B ) File No. 78-28

Serial Nos. 1-4

Returned

By

acc'd for the Act

*Later References*

G. G. Dept. 31-

# General and Revenue Secretariat.

*Serial Nos.* Four

**Part B for** Jury

SUBJECT

Note by Sir Alfred Chatterton on Gauhena-
hati Fruit Farm.

Rubber

| General and Revenue Secretariat | G. G. File No 78 | App. F. III—2] of 192 8-2 |
|---|---|---|

| Serial No. | |
|---|---|
| D. 8469 | Note by Sir Alfred Chatterton re the Ganganthalli Fruit Farm.<br>Secy's note: "Copies may be sent to the Agri. Board and Dir. of Hort: for opinion".<br>2nd Member's orders:- 'yes.' 2nd C.S.-B. 16.4<br>Subd with draft.<br>16.20.4.29. |
| 2 | D. 11442-3 & 3.5.29<br>to<br>Secy. Board of Agri in Dir of Horticulture<br>Forwards the Copy of the note on Ganganthally Fruit-farm by Sir A Chatterton - for favour of remarks. |
| 3 | Letter no LD 96 of 25th May 1929<br>from Secy. Board of Agri.<br>4/ Subd for perusal. The Secy. Board of Agri. suggests that the matter may be referred to the Hort: Sub Committee.<br>5/ The opinion of the Dir of Hort: may also be awarded.<br>16.28.5.29 |
| 4 | 6/ Opinion of the Dir of Horticulture may be awarded<br>Gen. Sec.) 2/6/29 Asst. 6/6. Cav 6/6 |

Cav 6.6.29

GEN. & REV. SECRETARIAT. 6 MAY 1929 DEVELOPMENT BRANCH.

GEN. & REV. SECRETARIAT. 29 DEVELOPMENT BRANCH.

NOTE.—Contn. sheet

WD 021—GPB—30,000—21-8-28

Serial No.

4

Letter no. 2261 g 3rd April 1930 from the Dir. of Horti. Submitting his remarks on Sir Alfred Chatterton's Note regarding Ganganhalli Fruit Farm.

8 Submitted for perusal. As Krumbiegel thinks, there is nothing more that has been done by Mr. Isaac, and suggests the formation of a State Council for carrying on research work connected with fruit culture.

9 It is under consideration to develop fruit-culture in certain areas along the Irwin Canal and it is proposed to appoint a Committee to go into this question. This question is being dealt with in the G.C. Confidence Section; this may also be sent to the G.C. Section for Consideration. Submitted for orders.

18.9.4.30.

G.C.)

22/4/30

10) The file re formation of a Committee referred to above is before the Dewan.

11)

22.4.30.

24/4. A copy of letter issued in the G.C. file is put up herewith. This will be returned to G.G. Section.

22/5/30

22/5

1455.

NO. 1597 Date 21.4.30

Note :—Contn. sheet

WD 021—GPB—30,000—21-8-28

8599

App. F. III—2]

General and Revenue Secretariat. E. & G. File No. 78 of 1928.

Serial No.

12 Subd for orders -
KB. 26.5.30.

13 The report of the Committee may be awaited.
(Gen. Sec.)

Can 3.6.30

KB 12/6/30

Can 12/6

14 To the E & G section
for note, and intimation
KB. 14.6.30. the decision of the
Committee

15 Report referred to has not yet been received in E.C. Section. Perhaps it will not be sent to E.C. Section, but will be dealt with in the Section in which the N.R.S. Committee's report will be dealt with probably in the Pol. Section.

14/6.

16. Para 15 is for perusal; if approved this may be filed for the present.
KB. 14.6.30. Yes Can 17/6

GEN. SECRETARIAT
18 JUN 1930
DEVELOPMENT BRANCH

NOTE—Contn. sheet.

WD 666—GPB—30,000—26-7-29

G.G. 78-28-1

OFFICE OF THE SECOND MEMBER OF COUNCIL
9 APR. 1929
No. 764

GEN. & REV. SECRETARIAT
8469
6 APR. 1929
DEVELOPMENT BRANCH

Rec. from Sir A. C. Lesley (Secy) Cen. 6.4.29
C/Secy. May be sent to Mr. Agr. Bot & Dir of Hort. for Opinion
2 Members
Jer 8/4
CSM
Web
V. 8/4

THE GANGUHALLI FRUIT FARM.

On the 4th April 1929, I visited the Fruit Farm at Ganganhalli which has been established by Mr. Mc Isaac. I was very greatly surprised at the results which he has obtained in the course of the last ten years. Apples, Oranges, Citrus fruit, and Pine Apples were the principal products. Mr. Mc Isaac told me that if a sufficient water supply is available to fruit gardens, similar results can be obtained in many other areas round Bangalore. It appears to me that Fruit Gardens, with a water supply from wells can certainly be established without difficulty if the men who start them are properly trained on the system worked out by Mr. Mc Isaac. Extraordinary figures were given to me by Mr. Mc Isaac regarding the value of the crops he has obtained and a very few acres of really good trees appear to be sufficient to yield a man a very comfortable living. I think it is hardly likely that the best commercial results will be obtained on any large extension of cultivation without the establishment of a Cold Storage Ware-house in Bangalore. It is probably premature to go into this question in detail, but I think some arrangements should be made to get a number of apprentices trained under Mr. Mc Isaac. There is a great complaint of lack of opportunities by the middle classes to obtain employment of a remunerative character. Here at any rate appears to be an opening for young men and possibly for retired officials who can command the necessary capital. Such young men must be imbibed with the desire to cultivate the land and willing to undergo the privations necessary to make successful fruit growers i.e., they cannot live in Bangalore and make occasional trips to their farm, but they must live on the spot and supervise the work continuously. The ordinary graduate seems to prefer a sedentary life but there should be very large number of young men who have a natural liking for such a work and if assistance was given to them to get suitable training it might lead to a very large developments of Fruit Gardens in the State. It is hardly possible to

for me to exaggerate the prospects of development in this direction and I will only allude to what is going on in California, Florida, Ontario and certain other parts of Australia. Fruit is abnormally dear in India and the usual arrangements for marketting it are singularly deficient. Mr. Mc Isaac told me that he sells his crop of Apples at an average of a Rupee per dozen, but the ultimate customer pays for them Rs.4/- a dozen and for selected specimens as high as Rs.6/- a dozen. I am of opinion that the possibilities of this industry should be carefully examined and proposals formulated for its development. I have no practical experience of fruit growing in India, but it does appear to me that the problem of growing good fruit has been solved in a most remarkable manner and as Mr. Mc Isaac is anxious to see other people following his example, it would certainly be wise to ascertain in what manner his experience can be utilised to encourage others to take to the same kind of work.

I might also point out that a profitable subsidiary outcome of the development of Citrus cultivation would be the preparation of Candied peel and the preservation of small fruits in sugar.

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S Ryrd Chatterton
6-4-29

The Gangenhalli Fruit Farm. 99

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p.t.o.

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Sd. Alfred Chatterton
6.4.29

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" C O P Y "

Chinnamma
13/6
For Secretary to Government,
Development Departments.
16/-

ACH.3.

App. F. G. 9]

GOVT. OF H. H. THE MAHARAJA
OF MYSORE.

GEN. & REV. SECRETARIAT.

—— Ry. Ry. 78-29-1

OFFICIAL MEMORANDUM.

No. 11.462-3/29-30

Copy of The accompanying ~~Petition Registered~~
No. 12 ..... dated 6th April '29
~~received at the General and Revenue~~
~~Secretariat from~~ by Sir Alfred
Locatelli of Gangenhalli
Fruit Farm.

(with Complts)
is forwarded, ~~together with its enclosures~~
to the Secy Board of Agri. &
(ij Dir of Horti.
.....for favour of
remarks.

in case of (ii)

By Order,
6.5.29
for Secretary.

BANGALORE,
..... 19.....

16.5.29

[P. T. O.

WD 2369.-GPB—3,000—14-6-27

ಅರ್ಜಿದಾರ್..... .....ತಾಲ್ಲೂಕು

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ಬೆಂಗಳೂರು.

By Order,

Secretary.

G. O. 98-22-3. (4

BOARD OF AGRICULTURE.

Bangalore, dated.....25th May 1929. 192

10088
REV. DEPARTMENT SECRETARIAT.
27 MAY 1929
DEVELOPMENT BRANCH

NO. 1806

From

K. BHIMA RAO, Esq., B.A., F.C.S.,
SECRETARY, BOARD OF AGRICULTURE,
BANGALORE.

To

R. Ranga Rao, Esq.,B.A.,B.L.,
Offg. Chief Secretary to the Govt. of H.H. the
Maharaja of Mysore,
B a n g a l o r e.

Dev
RR 27/5/29
27/5

Sir,

With reference to your No.D. 11443-/ 4-478-28-2 dated 3rd May 1929 forwarding a copy of Sir Alfred Chatterton's note on the Gangenahally's Fruit Farm for opinion, I have the honour to state that the question of developing fruit cultivation in the neighbourhood of Bangalore has been considered at more meetings than one of the Horticultural Sub-committee of the Board of Agriculture and it was at the instance of the Board that Govt. were pleased to sanction the following :-

i. revised rules for the granting of loans for the cultivation of fruit.
ii. the appointment of Horticultural Inspectors to conduct propaganda and to give technical advice and help to fruit growers.
iii. starting of a central nursery and orchard in the Lal Bagh.
& iv. reviving the Horticultural School.

Although it is too early to expect definite and reliable data to show how far these measures have had the desired effect in stimulating the development of this industry, the fact that the demand for fruit-culture loans has been much in excess of the budget provision is, I think, an indication of the desire of the ryots to take advantage of the facilities offered by Government. Further and more tangible effects will have to be looked for not in the near future.

There are in Sir Alfred's note two new points which deserve

to be seriously considered viz., (1) utilising Mr. Mc Isaac's valuable experience as a highly scientific and successful fruit grower for the development of fruit culture as a whole and (ii) diverting some of the educated youngmen of the middle classes to this industry from the beaten track of Govt. service which is getting more and more over-crowded. The first of these is easier and more practicable. There are already in the neighbourhood of Bangalore a number of fruit growers doing fairly good business although none of these has, as far as I am aware, attained the degree of perfection reached by Mr. Mc Isaac. If arrangements could be made on Mr. Mc Isaac's estate to enable some of these or their representatives to stay there for a full season I dare-say they would be very willing to learn Mr. Mc Isaac's improved methods and try to put them into practice in their gardens. Something similar to the short courses which the Department of Agriculture was arranging at Hebbal and other Govt. Farms could, I think, be easily arranged. As regards the diverting of educated youngmen to fruit culture the one formidable difficulty seems to be the question of finance. Although a well established fruit garden gives a very much better return than an ordinary agricultural farm and the work on it is likely to be less distasteful, the former needs a higher initial outlay and more re-curring expenditure over a very much longer period of time before it begins to yield. Educated youngmen of the middle classes of the type that ordinarily hanker after Govt. service have generally not the wherewithal to go in for this even if they have the desire and the necessary technical training. If however some scheme similar to the scheme of agricultural colonies now before Government is likely to be viewed with favour by Government there seems to be every likelihood of its becoming one of the means of solving the problem of unemployment though it may be to a very limited extent. The matter may perhaps be referred to the Horticultural Sub-committee for working out the details.

I have the honour to be,
S i r,
Your most obedient servant,

K. Nanjunda Rao

Secretary,
Board of Agriculture.

G. G. 78-28-2

Telegraphic adress
"Horti., Bangalore."

# DEPARTMENT OF HORTICULTURE, 6
# MYSORE STATE.

No. 2261

*Lal-Bagh, Bangalore,*
April 3, '30 *1921*.

FROM

G. H. KRUMBIEGEL, ESQ., F.R.H.S.,
DIRECTOR OF HORTICULTURE IN MYSORE, LAL-BAGH,
BANGALORE.

To

The Chief Secretary to the Government
of H.H. the Maharaja of Mysore.

CHIEF SECRETARY. 5 APR. 1930

5 APR. 8579

Sir,

I have the honour to acknowledge receipt of your Memo. No. D.11442/G.G.78-28-2 dated the 3rd May 1929 forwarding for my remarks a copy of Sir Alfred Chatterton's Note on a visit to the Gangenahalli Fruit Orchard and making certain observations on the extension of Fruit-Growing generally.

2. I may say, at the outset, that there is nothing new in the Note and that all measures advocated are already being actively pursued. When I resumed duty in 1921, Mr. McIsaac was growing Farm-crops and he was one of the earliest clients who took up fruit under my advice and direction. We have since assisted in starting some 50 other gardens and we are annually importing about 10,000 apple & citrus trees for distribution to old and new clients and the spreading of fruit-cultivation is proceeding satisfactorily due to the help and advice given by the Department including our inspectors and the spraying staff. Nor is there any special system practised by Mr. McIsaac. The practice of surrounding the root-collar of the plants by about a cubic foot of pure sand and placing an earthenware ring to prevent water and soil being washed into the sand was first started by me in 1912 in the Palace Orchard with grapevines to keep off white ants. When later on apples suffered

from

from collar-rot, the same method was adopted for these plants also in order to keep the collar aerated and to facilitate prompt inspecting and spraying in in case of attacks. Mr. McIsaac adopted this also on my advice when he started planting. When soon after a few plants showed signs of collar-rot, Mr. McIsaac opened out the roots by removing the sand in order to spray the roots. The roots were left open for some 2 or 3 weeks for re-examination and as the plants recovered quickly, Mr. McIsaac concluded that the full exposure of the root-collar to the air was beneficial and he removed the sand from all ~~the~~ his trees. This then has become to be looked on as his "system". The trees have not suffered for the last two years(though the crop has been ~~left~~ less) The crop brought R5.20/- per tree in the first season after opening the roots, but only R5.5/- the following two seasons which may be however due to other causes. The apparent successes of the open-root system in his orchard is due largely to the fact that his orchard lies below a large tank and there is an excess of sub-soil water. In a dry, elevated and exposed place it would most likely lead to failure. It would therefore not do to adopt his system for all conditions. There are, on the other hand, -- valuable lessons to be learned at Mr. McIsaac's orchard in the careful way of irrigation, manuring, turning of the surface soil, spraying etc. and, above all, the keen interest in details and the hard personal labour which Mr. McIsaac and his sons apply in the working of the place, as also the unstinting expenditure which is readily incurred in the initial preparation of the ground, in manures and materials necessary for proper cultivation.

3. As far as possible, we afford our horticultural students opportunities to visit the Farm.

4. If Mr. McIsaac was willing to take on apprentices I am of opinion they should first acquire some theoretical and practical horticultural knowledge which will enable them to judge the ---

applicability

applicability of the methods practised at Gangenahalli to varying conditions in other parts of the State.

5. Mr. McIsaac has been good enough to put down a large numb of kinds for trial -other than Rome Beauty. Some of them failed and he had to pull them up after 2 or 3 years wasted efforts and expenditure. He naturally declines to do any more of such experimental work which should be done by the State. So that this experience will be lost to the apprentices.

6. Again much work has got to be done in manuring as effecting the flavour, texture and keeping quality of the fruit, especially the Citrus section. Owing to want of funds I am not able to give Mr. McIsaac the necessary manures. nor would it be fair to force on him the attendant risk of such trials. In this respect therefore the apprentices would not get that wider knowledge and experience neceeeary for independent enterprise.

7. I therefore repeat with emphasis what I have said so often that unless and until we have a proper State Orchard for all such research - experimental - and demonstration work, the logical development of Fruit Cultivation has no hope.

8. I gave a full report on this subject in 1914 in which (on page 12) I pointed out as the first and foremost measure - the starting of a properly equipped orchard. Again in 1920 I wrote a full report on the development of Economic Horticulture and have even since pressed this point with no success. Want of funds has been the reason urged, but I hold with all due respect, that want of foresight and recognition of the vast importance of this work is more to blame.

9. In spite of these drawbacks, much work has been done in popularising Fruit Cultivation and many new orchards have been started. Fruit preserving on a household basis is also being

taught

taught, and advocated. A Fruit Nursery for the distribution of indigenous kinds which can be supplied gratis is doing good work some 4000 trees have already been supplied.

10. All this has however brought into greater prominence the need for more men who can give technical advice to the growers. There should be at least one Horticultural Inspector for each district and their training should be based on sound practical work in the State Orchard.

11. One section of this orchard i.e. a Grape-vine Station was sanctioned last year, but funds cut out from the current budget.

12. The Horticultural School has no funds for contingent expenses - thus teaching facilities are limited.

13. Another urgent need is the organisation of a Cooperative Fruit Sale Societies(Fruit-Growers' Associations) for which proper facilities for Cold Storage, Receiving - Grading - and Packing rooms are necessary as also the study of railbransport in refrigerating waggons. I have asked Government to permit me to study existing conditions in Bombay and Calcutta along with other work connected with designs for other institutions. This has not been sanctioned so far.

14. In connection with starting some young men, who have had training in Fruit Cultivation, on their own plantations on the lines of the Agricultural Colony Scheme, a preliminary scheme is now before Government.

15. I have proposed firstly that with a view of encouraging Fruit Cultivation along the Irwin Canal, a trial and demonstration orchard be established on the North Bank below the Krishnaraja Sagara Dam and secondly that at intervals some 5 acre demonstration plots be started along the canal up to the Hulikere Tunnel.

Under consideration in Govt re-Section

This is the area within which no regular wet crops are to be allowed so that the development of fruit cultivation can be given a fair chance. After these five-acre units are in working order, say after 2 or 3 years, they may be either leased or sold to private growers, with an additional 5 acres of adjoining land. Conditions of easy repayment on instalments and regulations of working the units could be drafted on lines similar to those laid down for the Agricultural Colony.

16. These established units will give the prospective colonists a better chance of success than the start on bare lands. The cost of laying out and maintaining for 3 years such a Unit will be about Rs.8,000/-.

17. Should there be, on the other hand any approved applicants who are able and willing to start such units on their own initiative, they may be given this amount in progressive payments under the Fruit Loan Rules.

I have the honour to be,

Sir,

Your most obedient servant,

Director of Horticulture in Mysore.